What is claimed is:

1. A method of fabricating an optical attenuator comprising the steps of:

a. arranging a first end of a first optical fiber and a second end of a second optical fiber so that they face one another in close proximity;

b. laterally offsetting from one another the first and second ends of the optical fibers;

c. fusing the first end of the first fiber to the second end of the second fiber to create a fusion splice;

d. measuring attenuation imposed on an optical signal transmitted from the first to the second optical fiber and through the fusion splice to determine an initial deviation in attenuation from a prescribed value;

e. re-fusing the fusion splice while exerting an axially directed force on the first and second ends of the optical fiber;

f. repeating step (d) to determine a subsequent deviation in attenuation from the prescribed value;

g. repeating step (e) to reduce the subsequent deviation in attenuation;

h. if necessary, repeating steps (f) and (g) until a resulting deviation in attenuation falls within a prescribed tolerance.

2. The method of claim 1 wherein the initial deviation results in an attenuation that is less than the prescribed value and the axially directed force compresses the first and second ends of the fibers.

3. The method of claim 1 wherein the initial deviation results in an attenuation that is greater than the prescribed value and the axially directed force pulls the first and second ends of the fibers apart from one another.

4. The method of claim 1 wherein the prescribed tolerance is less than or equal to +/- 0.05 dB.

5. The method of claim 1 wherein the step of creating a fusion splice is performed by an electric discharge fusion splicer.

6. The method of claim 1 wherein the first and second optical fibers are single mode fibers.

7. The method of claim 1 wherein the first and second optical fibers are multimode fibers.

8. A fusion splice optical attenuator formed in accordance with the method of claim 1.

9. A fusion splice optical attenuator formed in accordance with the method of claim 6.